Title (en)

Integrated circuit for image pickup device

Title (de)

Integrierter Schaltkreis für Bildaufnahmevorrichtung

Title (fr)

Circuit intégré pour dispositif de prise de vue

Publication

EP 1246457 A2 20021002 (EN)

Application

EP 02252244 A 20020327

Priority

JP 2001094727 A 20010329

Abstract (en)

A design for reducing the power dissipation in an integrated circuit for an image pickup device. Placing a circuit block (2), such as for generating a driving signal to an image pickup apparatus, in a standby state within a vertical blanking period or horizontal blanking period reduces the power dissipation at the circuit block (2). Since the blanking period is short, it is necessary to rapidly restore normal operation from standby so as to ensure the standby time. A switch (6) is provided between a terminal of the circuit block (2) and a capacitor (4) that is provided for voltage regulation at the terminal. A controller (8) turns off the switch (6) and disconnects the capacitor (4) from the circuit block (2) in a period where the circuit block (2) is placed in a standby state. As a result, variations in the amount of stored charge in the capacitor (4) during standby are suppressed, and while resetting to normal operation the time for returning the capacitor (4) to the amount of stored charge for normal operation is shortened so that the reset operation is performed rapidly. <IMAGE>

IPC 1-7

H04N 5/335; H04N 5/232

IPC 8 full level

H01L 27/148 (2006.01); **H04N 5/232** (2006.01); **H04N 5/335** (2011.01); **H04N 5/372** (2011.01); **H04N 5/376** (2011.01)

CPC (source: EP KR US)

H04N 23/65 (2023.01 - KR); **H04N 23/651** (2023.01 - EP US); **H04N 25/00** (2023.01 - EP KR US)

Cited by

US9614094B2; EP2752980A1; EP2804074A3; EP3570138A1

Designated contracting state (EPC)

DE FI FR GB NL

DOCDB simple family (publication)

EP 1246457 A2 20021002; **EP 1246457 A3 20030319**; CN 1198448 C 20050420; CN 1379585 A 20021113; JP 2002300479 A 20021011; JP 4508452 B2 20100721; KR 100416189 B1 20040131; KR 20020077183 A 20021011; TW 548963 B 20030821; US 2002144161 A1 20021003; US 6907536 B2 20050614

DOCDB simple family (application)

EP 02252244 A 20020327; CN 02103348 A 20020129; JP 2001094727 A 20010329; KR 20020016991 A 20020328; TW 91100430 A 20020115; US 10063402 A 20020315